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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,885	10/30/2000	Steven M. Ashe	57-000406	7242

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EXAMINER

SINGH, SATWANT K

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/699,885

Applicant(s)

ASHE, STEVEN M.

Examiner

Satwant K. Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 8, 10-12, 17 and 20 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 6, 7, 9, 13-16 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 12 is objected to because of the following informalities: misspelled word: "invocable". Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 8, 10-12 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Patel et al. (US 5,566,278).
3. Regarding Claim 8, Patel et al disclose a printer (printer 314) comprising: a controller (printer handler 414) configured to receive one or more printerlets (objects) and data from one or more computers connected thereto (Fig 4.), where each printerlet (object) includes one or more printer configuration instructions (series of simple commands generated by application program 402 in order to perform various formatting and pagination functions) (col. 8, lines 6-8) and the controller invokes each printer configuration instruction (information flows through grafport and as indicated by arrow 412, is provide to a printer handler) (col. 8, lines 14-26); a memory connected to the controller (intermediate storage 522), the memory storing therein a plurality of object oriented classes (subclasses) each configured to control at least one operation of the printer(spooler 518 receives the incoming information stream and stores it, in incoming

order, in an intermediate storage location) (col. 8, lines 42-53), and a print engine connected to the controller to be controlled thereby to print data on print media as a function of at least one object oriented class invoked by the controller from the memory in response to the controller invoking at least one printer configuration instruction (printer handler 510 is a type of printer driver which controls and drives a specific printer) (col. 8, lines 54-67, col. 9, lines 1-6).

4. Regarding Claim 10, Patel et al disclose a printer wherein the controller is connected to the one or more computers via a computer network system which is utilized to convey the one or more printerlets and data to the printer (printer sharing) (col. 21, lines 19-35).

5. Regarding Claim 11, Patel et al disclose a printer wherein each object oriented class includes one or more procedures which operate on the data (convert the source description of the document into a stream of data target for a particular print job) (col. 11, lines 63-67 and col. 12, lines 1-8).

6. Regarding Claim 12, Patel et al disclose a printer connectable to one or more computers (printer sharing), the printer comprising: control means connected to one or more computers for receiving therefrom one or more printerlets and data (document makes a print request through TPrinter... the printer handler will schedule the job through the TImagingTask and TPrint DeviceChannel)(col. 21, lines 19-35); computer storage means connected to the control means and storing therein a plurality of object oriented classes invocable by the control means (TPrintDevice converts a document to the printer imaging model) (col. 17, lines 28-51), each object oriented class configured

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to control at least one operation of the printer (a print job has a reference to the printer's persistent data) (col. 16, lines 35-46); and print means connected to the control means, the print means printing data on print media in response to receiving commands from the control means (the imaging task get the spool stream and the job description out of the job's persistent data and asks the print device to process it) (col. 16, lines 35-46), wherein: the control means is responsive to the one or more printerlets for causing at least one object oriented class to be invoked for processing the data (Tprint Device converts a document to the printer imaging model) (col. 17, lines 28-51); the control means processes the data as a function of the invoked object oriented class (RenderPage calls HandleBeginPage, HandleRenderPage, and HandleEndPage) (col. 17, lines 28-51); and the control means issues commands to the print means as a function of the processing of the data (the printer handler will schedule the job through TImagingTask and TPrintDeviceChannel) (col. 21, lines 19-35).

7. Regarding Claim 18, Patel et al disclose method including the steps of: receiving at the virtual input port a printerlet having at least one printer configuration instruction print channel 502 receives a print job) (col. 8, lines 42-43); invoking each printer configuration instruction (printer handler imaging task receives one job at a time) (col. 11, lines 5-16); and invoking another one of the object oriented classes as a function of at least one invoked printer configuration instruction (TprintDevice converts a document to the printer imaging model) (col. 17, lines 28-51).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2, 5, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al (US 5,566,278) in view of Lee (US 6628,413).

10. Regarding Claims 1 and 17, Patel et al teach a method of controlling a printer to print data on print media, the method comprising the steps of: providing a printer (printer 341) having memory (intermediate storage 522) including a plurality of object oriented classes (subclasses) stored therein, with each class configured to control at least one operation of the printer (spooler 518 receives the incoming information stream and stores it, in incoming order, in an intermediate storage location) (col. 8, lines 42-53), associating a virtual input port in the memory (arrow 524) with a physical input port of the printer (printer port 418); invoking each printer configuration instruction (col. 11, lines 5-16); receiving data at the virtual input port (col. 7, lines 58-67 and col. 8, lines 1-26); invoking at least one object oriented class as a function of at least one invoked printer configuration instruction, processing the data as a function of the at least one invoked object oriented class (printer handler 510 is a type of printer driver which controls and drives a specific printer) (col. 8, lines 54-67, col. 9, lines 1-6); and printed the processed data on print media (the commands, indicated schematically by arrow

430, are provided to the actual print device indicated by box 528 for printing) (col. 8, lines 54-67, col. 9, lines 1-6).

Patel et al fail to teach receiving at the virtual input port at least one printerlet having at least one printer configuration.

Lee teaches receiving at the virtual input port at least one printerlet having at least one printer configuration (new complex graphics operators can be created which are subclasses of the existing graphics primitives) (col. 4, lines 1-21).

Therefore, it would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Patel with the teaching of Lee to use the Java-specific features of object-orientation, distribution, interpretation, security, architecture and neutrality, portability, performance, multi-threadness, and dynamic loading to implement an improved printer.

11. Regarding Claim 2, Patel et al disclose a method wherein each printer configuration instruction is an interpretive command (print command) (col. 11, lines 5-16).

12. Regarding Claim 5, Patel et al fail to teach a method wherein each class includes one or more procedures which operate on the data received at the virtual input port with the one or more printerlets.

Lee teaches a method wherein each class includes one or more procedures which operate on the data received at the virtual input port with the one or more printerlets (Java printers can be implemented which utilize subclasses of the Printer class) (col. 8, lines 1-15).

Therefore, it would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Patel with the teaching of Lee to use the Java-specific features of object-orientation, distribution, interpretation, security, architecture and neutrality, portability, performance, multi-threadness, and dynamic loading to implement an improved printer.

### ***Allowable Subject Matter***

13. Claims 3-4, 6-7, 9, 13-14, 15-16, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yan et al. (US 6,003,062-5) disclosed a method and system for distributed processing of applications on host and peripheral devices.

Inoue et al (US 2002/0105664) discloses printer enclosing network computer and computer network system employing the same.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (703)



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306-3430. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

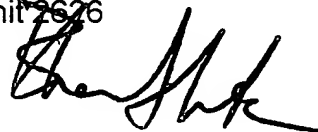
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Satwant Singh*

sks

Satwant K. Singh  
Examiner  
Art Unit 2626



**BHAVESH M. MEHTA  
SUPERVISORY PATENT EXAMINER  
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